

REMARKS/ARGUMENTS

Claims 1 – 7 and 22 have been amended and claims 17 to 20 have been cancelled. The claims as amended are believed to clearly distinguish over the cited prior art. Favorable reconsideration by the Examiner in view of these amendments and the remarks which follow and formal notification of the allowance of these claims are solicited.

The claims stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bertrand et al. WO2002/098926 in view of Guiseppi-Elle US 5,766,934. As to claim 21, the Examiner additionally relies upon Masunaga US 3,759,797.

Bertrand et al. describes a process for depositing by electrografting a strong adherent polymer coating on an electrically conductive surface comprising an electromechanical grafting at the surface of an active monomer comprising a reactive functional group for attachment of a molecule having at least one complementary reactive group. The electrografted coatings of polymers disclosed in Bertrand et al. allows the attachment of small molecules such as proteins, peptides, oligonucleotides, dyes, drugs and anti-bacterian compounds.

However Bertrand et al. does not mention a specific method for encapsulating biocompatible polymers involving the use of a solid support with at least 90% of functional groups of interest accessible for the formation of a covalent, ionic or hydrogen bond with a complementary group, and in which the accessible functional groups of interest density is comprised between $10^4/\mu\text{m}^2$ and $10^{10}/\mu\text{m}^2$, in order to encapsulate macromolecules. Such macromolecules have complex three-dimensional structures and are usually difficult to attach to electrically conducting surfaces, and in particular to metals.

The advantages resulting from the specific method for encapsulating biocompatible polymers of amended claim 1 are demonstrated by Example 6 and Example 13 of the present patent application. These examples show that the encapsulation of macromolecules having complex three-dimensional structures such as polysaccharides (i.e., hydroxyethylcellulose in Example 6 and a functionalized dextrane in Example 13) is possible thanks to the great accessibility of the functional groups of interest on the electrografted coating used in the claimed method.

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As none of the prior art cited by the Examiner discloses such a specific method for encapsulating macromolecules having complex three-dimensional structures, then the combination of all the recited features of amend claim 1 was not obvious to the person skilled in the art.

Consequently, the invention as claimed is clearly non-obvious with respect to the prior art. The applicant believes that the accompanying amendments and the above comments place the application in condition for allowance.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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